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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/612,972

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Pierre Holzschuh

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EXAMINER

PEARSE, ADEPEJU OMOLOLA

ART UNIT

PAPER NUMBER

1761

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/612,972

Applicant(s)

HOLZSCHUH ET AL.

Examiner

Adepeju Pearse

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 6/20/2006 have been fully considered but they are not persuasive. Applicant states that the new claims 17-34 have been drafted as method claims. However, the prior claims 1-16 were also method claims and therefore suggests no significant change to the new claims. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., tubular element being closed surface, fully loaded) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant argues that the configuration of the tubular element being a closed surface surrounded by heating surfaces reduces unnecessary loss of heat and energy. However, this characteristic is not claimed. Besides, Underwood et al teach that the reactor is wrapped with heating coils for heating purposes (col 13 lines 4-5).
2. Applicant is reminded that Underwood et al is the primary reference and the missing elements not disclosed are taught by Wistreich et al. Applicant argues that the reference does not disclose the joule effect heating. However, Underwood et al teach that the reactor is wrapped with heating coils for heating purposes (col 13 lines 4-5).
3. Applicant argues that Underwood et al utilizes temperature in the range of 400°C to 650°C. However, this temperature range is within applicant's recited range of 300 to 400°C.

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 17-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Underwood et al (U.S. Pat. No. 4,876, 108) in view of Wistreich et al (U.S. Pat. No. 3,875,314). With regard to claims 17 and 30, Underwood et al disclose an aqueous wood smoke solution for flavoring foodstuffs by heating in an oxygen starved atmosphere ground wood or cellulose to between 400°C and 650°C and separating and collecting the water soluble liquid products (abstract). However, Underwood et al failed to disclose a vibrating element. Wistreich et al teach a liquid smoke and method for manufacture comprising feeding hardwood such as sawdust in the form of a vibratory conveyor for advancement of the material through an enclosed space heated to a temperature sufficient to cause thermal destruction or degradation of the wood particles. The bottom side of the plate is heated directly or indirectly to an elevated temperature of about 600°C to 750°C for transmission of heat sufficient to cause carbonization of the wood particles from the feed end to the delivery end, after which the burned or charred wood particles fall from the conveyor for disposal (col 2 lines 37-52). It would have been obvious to one of ordinary skill in the art to modify Underwood et al with Wistreich et al by utilizing a vibrating conveyor in order to advance the material into the heated enclosed space.
3. With regard to claim 18, Underwood et al failed to disclose a vibratory element having a horizontal/vertical component. However, Wistreich et al teach a horizontal vibratory conveyor for advancement of the material through an enclosed space (see fig. 1). It would be obvious to

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one of ordinary skill in the art to modify Underwood et al with Wistreich et al by utilizing a horizontal vibratory conveyor to advance the material to be heated.

4. With regard to claims 19 and 31, Underwood et al disclose that wood is commonly dried and fed to a reactor system (col 1 lines 52-56). However, Underwood failed to disclose preheating in a preheating zone in the tubular element. Underwood discloses that wood is oven dried prior to loading into a feeder and then into the reactor (col 11 lines 26-29). It would be obvious to one of ordinary skill in the art to expect that oven heating is a form of electrical heating.

5. With regard to claim 20, Underwood et al failed to disclose where the smoke produced is condensed. However, Wistreich et al teach that the fumes, vapors and smoke particles which are given off by the thermal reduction of wood particles are exhausted from the chamber through an outlet for passage into a condensate chamber (col 2 lines 56-60). It would be obvious to one of ordinary skill in the art to modify Underwood et al with Wistreich et al by utilizing a condensation chamber for the smoke produced in order to accumulate the smoke produced.

6. With regard to claim 21, Underwood et al failed to disclose re-injecting pyrolysis gas into the reactor. However, Wistreich et al teach that it is desirable to mount the condenser in communication with and preferably at the top of the reactor for continuous flow of vapors and gases exhausted from the top of the reactor to the inlet at the bottom of the condenser in order to enhance yield of materials extracted (col 3 lines 26-43). It would be obvious to one of ordinary skill in the art to modify Underwood et al with Wistreich et al by recirculating the vapors and gases in order to enhance yield.

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7. With regard to claims 22 and 32, Underwood et al disclose that pyrolysis takes place in an oxygen-starved atmosphere. It would be obvious to one of ordinary skill in the art to expect that the percentage of oxygen present would be extremely low as recited by applicant in order to prevent combustion of the wood particles while heated to elevated temperature.

8. With regard to claim 23, Underwood et al discloses parameters that should be optimized in a pyrolysis method to produce a suitable liquid product for use as liquid smoke including temperatures between 400°C and 800°C (col 6 lines 35-45). It would be obvious to one of ordinary skill in the art to expect that the temperature range would be strictly adhered to in order to optimize the process and produce a suitable liquid product.

9. With regard to claims 24-25 and 33, Underwood et al disclose wood or cellulose as a material (abstract).

10. With regard to claim 26, Underwood et al disclose a benzo [a] pyrene content of between 5 and 50ppb (col 5 lines 32-33) and that levels below 0.5ppb can be achieved (col 5 lines 50-51). However, Underwood et al failed to disclose a benzoanthracene content of 20ppb.

Benzoanthracene is a well-known carcinogen to humans and therefore it would be obvious to one of ordinary skill in the art to expect a low content as recited by applicant.

11. With regard to claims 27-28 and 34, Underwood et al disclose foodstuffs smoked utilizing liquid smoke (abstract).

12. With regard to claim 29, applicant is reminded that this is a product-by-process claim. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the

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same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

### ***Double Patenting***

Claims 1-16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application No. 10/765,123. The rejection is incorporated as cited in the prior office action.

### ***Conclusion***

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adepeju Pearse whose telephone number is 571-272-8560. The examiner can normally be reached on Monday through Friday, 8.00am - 4.30pm.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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